

HR-204 Safer Construction and Maintenance Practices to Minimize Potential Liability by Counties from Accidents

Key Words: Liability, Tort claims, Highway safety, County, Secondary Road Maintenance, Construction

ABSTRACT

Tort claims resulting from alleged highway defects have introduced an additional element in the planning, design, construction, and maintenance of highways. A survey of county governments in Iowa was undertaken in order to quantify the magnitude and determine the nature of this problem. This survey included the use of mailed questionnaires and personal interviews with County Engineers.

Highway related claims filed against counties in Iowa amounted to about \$52,000,000 during the period 1973 through 1978. Over \$30,000,000 in claims was pending at the end of 1978. Settlements of judgments were made at a cost of 12.2% of the amount claimed for those claims that had been disposed of, not including costs for handling claims, attorney fees, or court costs. There was no clear time trend in the amount of claims for the six-year period surveyed, although the amount claimed in 1978 was about double the average for the preceding five years.

Problems that resulted in claims for damages from counties have generally related to alleged omissions in the use of traffic control devices or defects, often temporary, resulting from alleged inadequacies in highway maintenance. The absence of stop signs or warning signs often has been the central issue in a highway related tort claim. Maintenance problems most frequently alleged have included inadequate shoulders, surface roughness, ice or snow conditions, and loose gravel.

The variation in the occurrence of tort claims among 85 counties in Iowa could not be related to any of the explanatory variables that were tested. Claims appeared to have occurred randomly. However, using data from a sub-sample of 11 counties, a significant relationship was shown probably to exist between the amount of tort claims and the extensiveness of use of warning signs on the respective county road systems. Although there was no indication in any county that their use of warning signs did not conform with provisions of the Manual on Uniform Traffic Control Devices (Federal Highway Administration, Government Printing Office, Washington D.C., 1978), many more warning signs were used in some counties than would be required to satisfy this minimum requirement.

Sign vandalism reportedly is a problem in all counties. The threat of vandalism and the added costs incurred thereby have tended to inhibit more extensive use of traffic control devices. It also should be noted that there is no indication from this research of a correlation between the intensiveness of sign usage and highway safety.

All highway maintenance activities introduce some extraordinary hazard for motorists. Generally effective methodologies have evolved for use on county road systems for

routine maintenance activities, procedures that tend to reduce the hazard to practical and reasonably acceptable levels. Blading of loose surfaced roads is an example of such a routine maintenance activity. Alternative patterns for blading that were investigated as part of this research offered no improvements in safety when compared with the method in current use and introduced significant additional cost that was unacceptable, given the existing limitations in resources available for county roads.

Eight recommendations resulted from this research. These are directed toward reducing the potential exposure of counties to tort liability. Recommendations are as follows:

1. Follow strictly the provisions of the Manual on Uniform Traffic Control Devices in the use of warning signs.
2. Establish a coherent and carefully documented policy governing the use of stop signs.
3. Establish a continuing sign inventory process.
4. Establish written agreements covering county line roads that clearly delimit responsibilities.
5. Use a ball bank indicator to establish advisory curve speeds where needed.
6. Establish a program to document conditions surrounding accidents on roads under county jurisdiction.
8. Develop procedures to assure timely notification of accidents on roads under county jurisdiction.